

**METROPOLITAN TRANSPORTATION COMMISSION**

# **San Francisco Bay Area Older Adults Transportation Study**

**Draft Final Report**

## **Appendices**

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**Appendix****Name**

A	Workshop Announcement and Materials
B	Working Group Materials
C	Documentation Of The Mapping Analysis

# **APPENDIX A**

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## **Workshop Announcement and Materials**

- Workshop Announcement
- Sample Agenda
- Barriers to Mobility – Preliminary Listing Used at Workshops
- Summary of Barriers and Solutions from OATS Workshops – April/May 2002

San Francisco Bay Area  
**Older Adults Transportation Study**

# Developing a Vision for Senior Transportation

The Metropolitan Transportation Commission (MTC) is conducting a study to formulate a regional strategy to address the growing transportation needs of older adults. You are invited to participate in a workshop to help:



- ★ Identify transportation barriers and needs of older adults in the Bay Area.
- ★ Develop a vision for how to address those barriers and needs.

## Who should attend?

- ★ Members and staffs of commissions on aging or advisory councils
- ★ Staff and leaders of organizations that serve seniors and advocate for senior issues
- ★ Senior center staff or city staff with an interest in senior transportation
- ★ Transit agency staff
- ★ Staff of transportation providers that serve seniors
- ★ Members of paratransit coordinating councils

## What Will Happen at the Workshops?

- ★ Brief presentation about the Older Adults Transportation Study
- ★ Facilitated discussion about barriers and needs in your area.
- ★ Brief presentation about promising approaches to improve transportation for older adults
- ★ Facilitated discussion about solutions and strategies
- ★ Voting to determine priorities

### There are five workshops to choose from:

- |  |  |  |
|--|--|--|
| <b>1 Vallejo</b><br>April 23, 2002<br>9:30 AM - 12:30 PM<br>John F. Kennedy Public Library<br>505 Santa Clara Street | <b>2 San Francisco</b><br>April 25, 2002<br>1:30 PM - 4:30 PM<br>St. Mary's Cathedral<br>1111 Gough Street | <b>3 Oakland</b><br>April 30, 2002<br>9:30 AM - 12:30 PM<br>Metropolitan<br>Transportation<br>Commission (MTC)<br>Auditorium<br>101 8th Street |
| <b>4 San Jose</b><br>May 2, 2002<br>9:30 AM - 12:30 PM<br>Silicon Valley United Way<br>1922 The Alameda              | <b>5 Novato</b><br>May 21, 2002<br>1:30 PM - 4:30 PM<br>Margaret Todd Senior Center<br>1560 Hill Road      |  |

Light refreshments will be provided. All locations are accessible to persons with disabilities, can be reached by public transportation, and have parking. See maps on reverse side for detailed directions and transit information.

**Please RSVP to Paul Lutey at: (415) 267-4896 or at [plutey@nelsonnygaard.com](mailto:plutey@nelsonnygaard.com)**

Please let us know if you have any special needs we should plan for.

## Vallejo

April 23, 9:30 AM - 12:30 PM



### John F. Kennedy Public Library

Joseph Room  
505 Santa Clara Street

#### Transit:

Vallejo Transit Routes 3, 4

**Parking:** Some on-street metered parking. Free on-site parking behind library.

## San Francisco

April 25, 1:30 PM - 4:30 PM



### St. Mary's Cathedral Hall A

1111 Gough Street

#### Transit:

MUNI Line 38, 38L

**Parking:** On-site parking available.

## Oakland

April 30, 9:30 AM - 12:30 PM



### Metropolitan Transportation Commission Auditorium

101 8th Street

#### Transit:

BART: Lake Merritt station

AC Transit: Lines 11, 35X, 36X, 59, 59A, 62

**Parking:** Limited on-street parking. Paid parking at Oakland Museum.

## San Jose

May 2, 9:30 AM - 12:30 PM



### Silicon Valley United Way

1922 The Alameda

#### Transit:

VTA Route 22

**Parking:** Free on-site parking available.

## Novato

May 21, 1:30 PM - 4:30 PM



### Margaret Todd Senior Center

1560 Hill Road

#### Transit:

Golden Gate Transit Routes 1 and 50

(at intersection of Diablo and Novato Boulevard)

**Parking:** Free on-site and street parking.



## **Bay Area Older Adults Transportation Study Workshop on Barriers and Solutions**

<b>Time</b>	<b>Topic</b>
1:30 – 1:45	Introductions and explanation of format.
1:45 – 2:00	Presentation of background information, results of research to date.
2:00 – 2:30	Facilitated discussion of barriers to mobility.
2:30 – 2:45	Break
2:45 – 3:30	What to do about the barriers. Facilitated discussion of strategies and solutions.
3:30 – 4:00	How to set priorities for action.
4:00 – 4:15	Next steps.

Contact:

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# **Bay Area Older Adults Transportation Study**

## **Barriers to Mobility**

### **Driving**

- Operating cost
- Safety and declining ability to drive—limited vision, reaction time, stamina
- Aggressive and unsafe drivers
- Stress of driving in traffic
- Difficulty driving at night

### **Getting Rides as a Passenger**

- Need to travel at the convenience of the driver
- Feeling under an obligation
- Concern about the driver's driving skills
- Some people don't know a lot of potential drivers to ask
- Potential ride givers have busy lives

### **Transit**

- Unreliable service
- Hard to get easily understood information
- Unwillingness of other passengers to offer seats
- Many seniors don't like to ride with teenagers or when buses are crowded.
- Lack of service evenings and weekends
- Long distances to bus stops
- Needing to wait outside
- Routes don't go where you need to go
- Suburban areas don't have a lot of service

### **Land Use**

- Location of housing and services

### **ADA Paratransit**

- Unreliable service—wait times, travel times
- Hard to schedule return trips
- Can't travel without advance planning
- Not all elders are eligible for service
- Some older people can't ride without an escort
- Hard to use for non-English speakers
- Doesn't serve places without transit service
- Expensive in some cases

### **Specialized Transportation**

- Very limited availability
- Limited to people travel to particular programs or for certain purposes

### **Walking**

- Limited stamina
- Weather (cold, hot, rain) and darkness
- Fear of crime
- Lack of sidewalks and poor sidewalks in many areas
- Busy, wide streets with limited places to cross
- Long distances to services and shopping

### **Taxis**

- High cost
- Drivers—may be unreliable, discourteous, may cheat, not understand the rider's language
- Few accessible vehicles

## Summary of Barriers and Solutions from OATS Workshops - April/May 2002

### Categories

Administration and Policy  
Advocacy  
Driving  
Design, Development and Planning  
Education and Information  
Funding  
Multi-modal and other

Pedestrian Safety  
Paratransit  
Rides  
Social Service Access  
Shuttles  
Transit  
Taxis

### Barriers

### Location

### Solutions

### Location

#### Administration and Policy

Processing to get a lift in the house can take a long time, varies from city to city.	Oakland
Medicare and Medi-Cal restrict provision of scooters for use inside the house.	Oakland
We have a system of complaints but not of rewards.	Oakland
Some seniors do not have mobility issues but still want services. Issue of defining who is a "senior." How should/do programs deal with seniors who are doing fine?	San Jose
Issue of defining the need.	San Jose
Growing senior population needs to be planned for.	San Jose
Sometimes, the most vocal people may not have the most need.	San Jose
Organizations are reluctant to begin offering any service out of concern that they could lead to a greater obligation.	San Jose
Planning for seniors working later in life	Vallejo

Regional agency needs to develop strategies for mobility in suburban areas	Novato
Change medical transportation policies so they don't rely on expensive ambulance service.	SF
Programs need to be designed, marketed to preserve user's pride, dignity (i.e. giving the driver a voucher).	San Jose
Even if there is a county senior transportation agency, there still needs to be a regional approach.	San Jose
Cities and local communities can assign dedicated drivers for elderly frail when they provide service; can still be within a county-wide structure.	San Jose
Involve transit agencies to help senior centers resolve the liability issues with providing transportation.	San Jose
Have paratransit drivers report elderly abuse; train drivers to spot and report problems.	San Jose
Senior transport "Czar"	Vallejo
Fund pilot projects.	Vallejo
Transportation needs to be made an integral part of long-term care of seniors (planning for aging).	Vallejo

### Advocacy

Build Advocacy at the grass-roots level	San Jose
Help people learn how to advocate.	San Jose
Organize a forum/task force/ongoing meetings to address these issues.	San Jose
Encourage advocacy by baby boomers for senior transportation services	San Jose
Build a broad base of support and advocate for senior transportation issues in the media.	Vallejo
Make outreach to the public at large, build support, change the way people think.	Vallejo

### Driving

Discomfort driving to unfamiliar areas.	San Jose
Some seniors do not have a car.	Vallejo

Make it more difficult to travel by car.	Novato
More punitive traffic law enforcement	Novato
Consider raising the driving age to 21 as in other states.	Novato
Make driving a "privilege" rather than a right. Set a cap on the age that seniors are allowed to drive.	Novato
More disabled parking in the City	SF
Mandatory reporting of unsafe drivers.	San Jose
More testing of drivers.	San Jose
Make driving safer through advanced vehicle technologies.	Vallejo

## Design, Development and Planning

Stairs in the house, lack of access equipment in the house	Oakland
Developers need to provide greater accessibility when they build (cities need to make accessibility requirements for developers).	Oakland
Seniors do not have a place to wait safely for paratransit services at their destinations (shopping centers, medical offices).	Oakland
Senior centers are not always accessible; it is difficult to find space to locate facilities close to transit, and locations that are close to transit can be on busy, hard-to-cross streets.	SF
Steps are a problem in San Francisco (at home entrances, inside apartments).	SF
Seniors living in hills are isolated, far from transportation services.	San Jose
Senior developments do not have transportation.	Vallejo

Make transit-friendly communities, locating transit-dependent people around transit centers.	Novato
New state guidelines/regulations to make sure senior developments have adequate transportation service	Novato
Establish the legal nexus between senior facilities and the transportation services that they could be required to help fund.	Novato
Coordinated living services and transportation	Novato
Plan holistically for senior life needs (transportation, housing, services, medical services).	Novato
Redirect the monies developers use on transportation (e.g., parking) to support other modes	Novato
Lifts in the house	Oakland
Ramps at people's homes	Oakland
Denser housing to provide more transit service	Oakland
Accessibility ordinance (like one in LA) with requirements for stairs, hallways, etc.	Oakland
Transit-oriented, mixed-use development for seniors	Oakland
Developers help make development accessible	Oakland
Plan review by transit and senior services	Oakland
State legislation like AB 1846 (Feb. 2000) to support housing options and home modification alternatives designed to support independent living.	Oakland
Taxi stands need to be accessible (close to the entrance of the medical buildings, with loading area secured so other cars won't block them, near curb cuts, with space to accommodate back-loading).	SF
Rights of way for scooters/golf carts.	San Jose
Consider legislation that would require better planning of senior communities.	Vallejo
Consider transportation needs in planning senior communities.	Vallejo
Design senior housing for access.	Vallejo
Require transportation in new developments along with parks, schools, etc. in general plans.	Vallejo
Require developers to include provisions for transportation.	Vallejo
Development requirements need to come from state legislation.	Vallejo
Plan for future growth.	Vallejo
Co-location of senior housing with transit service should be made part of planning/development process.	Novato

## Education and Information

Needs to be personal knowledge of services, destinations	Oakland	Adopt "mobility management": information and referral responding to senior transportation needs.	Novato
Problem of easily finding transportation information	Oakland	Joint programs for assistance and education between transit provider and senior centers (e.g., Bus Buddy program)	Novato
No system to help find transportation options other than paratransit	Oakland	Assistance to help seniors plan the safest, easiest routes to travel, including by driving.	Novato
Seniors are not aware of existing transportation services.	SF	MTC hire an ad agency to raise the public image of transit.	Novato
Awareness/education of the availability of outreach services	San Jose	Aggressive transit training like 55 alive	Oakland
Education for seniors to understand all the ramifications of transportation issues.	San Jose	DMV education for drivers about alternatives, before they stop driving	Oakland
Caregivers/family members not educated about issues.	San Jose	Marketing campaign about public transportation to change attitudes toward transit, and help people plan their transition	Oakland
Familiarity with driving makes it difficult to switch to transit.	Vallejo	Work with American Dental Association and American Medical Association to educate nurses, medical personnel about transportation services.	Oakland
Lack of information on paratransit	Vallejo	Place transit information at eye level, address noise on bus that prevents comprehension.	Oakland
Seniors having to use transit for the first time	Vallejo	Education	Oakland
		Make information more available, like the Alameda County website (Alameda networkofcare.org, not just in Alameda, also in Sacramento); information at libraries, internet services at library are important.	Oakland
		Transit information needs to be linked from Travinfo to local transportation providers.	Oakland
		More education for drivers, pedestrians and bicyclists.	SF
		Coordinated trip planning and information.	SF
		PR - public awareness	SF
		Educate engineers, policy-makers about senior perspective on street design, signal control..	SF
		Education – transit training	SF
		Educate MTC and other policy-making entities about the mobility challenges people face – including disabled, vision-impaired	SF
		Educate seniors early about the options to driving. (through AARP, including doctors and DMV).	San Jose
		Provision of multi-lingual information to help seniors advocate for services.	San Jose
		Train trainers at a senior center to help seniors transition from driving to other forms of transportation.	San Jose
		Address the fear of losing independence when seniors can no longer driver; help seniors know what the alternatives are.	San Jose
		Tap into students in gerontology programs to help efforts of meeting transportation needs.	San Jose
		Review classes for all drivers on basic driving rules and educate other drivers (to deal with unsafe, inconsiderate driving and road rage).	San Jose
		MTC should provide assistance/direction about transportation services; serve as a clearing house of information to organizations.	Vallejo
		Provide training for seniors to transition from driving to transit (by others who have made the transition).	Vallejo
		Philosophic shift in the perception of transportation in senior issues (aging in place requires transportation)	Vallejo
		Promote transit as social activity and as socially responsible	Vallejo

## Funding

Federal government programs needed for seniors	Oakland	Income tax check-off donation to senior transportation	Oakland
Not enough funding to address the needs of aging population	SF	Need funding for transit, paratransit services; need more money but also address allocation of funding.	Oakland
San Francisco has cut the budget for senior escorts (police program).	SF	DMV – increase license fees to provide a revenue source to assist the transition from driving.	Oakland
Medicare/Medicaid doesn't cover trip home from hospital - when Medicaid used to pay for gurney service, providers used to exist, now it no longer exists even for private pay.	SF	Enlist the auto industry to participate in the cost of public transit	Oakland
Funding sources need to be identified.	San Jose	Transportation should be covered by Medicare. Through Medicare, a flat fee for transportation services.	Oakland
Suspension of 'Healthriders' Program (supplement to usual Medi-Cal transportation services in San Mateo) because of funding.	San Jose	Assistance to lower fares	Oakland
Lack of funding for senior transportation	Vallejo	Use fines as a revenue source to fund transportation programs.	SF
		More money	SF
		Sustained and growing funding with need	SF
		Funding for the senior escort program	SF
		Link transit funding to infrastructure funding.	SF
		Broadening Medi-cal funding coverage to include preventive measures including transportation services.	San Jose
		Lobby for money to fund strategies; need to build advocacy at the grass-roots level.	San Jose
		Get more money.	San Jose
		Broaden medicare benefits/private insurance to include transportation.	San Jose
		Fund escorts for people who are disabled enough to need an escort.	San Jose
		Increase the funding for Outreach paratransit.	San Jose
		Fund supplemental services through Outreach so that multiple programs are provided by one simplified system for senior transportation not tied to disability. To the user, it would appear as one seamless system even if multiple entities are involved in funding.	San Jose
		Avoid the duplication of services; devise ways of different entities (i.e. cities) providing funding to a centralized agency.	San Jose
		Self-help tax initiatives to fund transportation for seniors and transit in general	Vallejo
		Funding for trial routes	Vallejo
		Dedicate money to seniors.	Vallejo
		Pay for shuttles with homeowners due - required in new developments.	Vallejo
		Shopping center shuttles could be financed through mall dues.	Vallejo
		Provide transportation as a retirement benefit (would be provided by employers).	Vallejo
		Promote funding for senior transportation programs	Vallejo
		Corporate donations of vehicles and drivers to senior centers	Vallejo
		Transit should be able to get paid by Medi-Cal--it took one operator a very long time to arrange this.	
		Tap funding streams from third party providers (e.g., funding for medical transportation providers).	Novato
		Innovative financing strategies	Novato
		Senior development residents subsidize and design transit service (e.g. through association fees at Oakmont Village in Santa Rosa).	Novato
		Additional gas tax to subsidize public transportation (and to discourage vehicle use)	Novato

¼-cent statewide tax for paratransit	Novato
Bond measure to fund senior transportation	Novato
Foundation funding	Novato
City Block Grant funding	Novato

### Multi-modal and other

Transportation is <u>not</u> seamless to the consumer.	Oakland
Cost issues for low-income seniors	Oakland
Needs to be better way of getting around different places on different services; transportation services and fares are too complicated.	Oakland
Need for coordination between transit and paratransit	SF
Consumers do not have a seamless way of getting from county to county.	San Jose
Longer travel times for senior trips	Vallejo

Bicycles	Oakland
Centralize/standardize training for paratransit, transit, and taxi drivers (e.g. through Community Colleges and ROP programs).	Oakland
Simplified, coordinated transportation systems	Oakland
Make transportation more seamless to consumers.	Oakland

### Pedestrian Safety

Crossing streets is difficult (inadequate signals and stop signs).	Oakland
Way too many cars. SF is not built for its existing traffic volumes.	SF
Commuters are not driving safely.	SF
It's cheaper to drive into the city than take transit.	SF
So many people run red lights. People do not obey traffic laws.	SF
Hills are unsafe for seniors.	SF
Absence of sidewalks (in suburban areas) and curb cuts makes transit/pedestrian access difficult.	SF
Need for timed crosswalks; upgraded signals; better crossing standards	SF
Even with better transit, paratransit, we still need better streets.	SF
Suburban drivers come into SF and drive without respect to pedestrians.	SF
Double turn lanes and separated right turn lanes are bad for pedestrians, especially seniors	SF
Traffic circles are confusing; they reduce pedestrians' view of traffic	SF
Right turn on red on city streets is dangerous to pedestrians.	SF
Vehicles stop in the crosswalks, forcing pedestrians to walk/cross in traffic flows.	SF
Pedestrians disobey traffic laws (disregard lights, crosswalks).	SF
Crossing streets (like Van Ness & Market) is difficult because of the crossing times.	SF
Department of Parking and Traffic is oblivious of the need for crossing times.	SF
Commuters are not using alternative transportation.	SF
Light Rail Vehicle/pedestrian interface is dangerous.	SF
Walking can be difficult/dangerous on a busy street.	San Jose
Crossing time is too short to cross street.	San Jose
Safety issues while walking	Vallejo

Walk signals at intersections; state standards about crossing times, audible signals	Oakland
Help getting scooters--leasing	Oakland
Paint and refresh crosswalks throughout the city and region.	SF
Wider crosswalks.	SF
Crosswalks – policies, standards, consistency	SF
Escorts – walking	SF
No Right Turn on Red as the standard in the City	SF
Longer crossing times	SF
Skills training for pedestrians	SF
Ticketing for jaywalking	SF
Pedestrian-activated longer crossing times	SF

**Paratransit**

Paratransit service is difficult between cities.	Oakland
Problems with paratransit drivers (not courteous, etc.)	Oakland
ADA Paratransit service problems: uncertain length of trips; service is designed only for people who have time.	Oakland
Uncertain pick-up time on ADA paratransit	Oakland
Paratransit does not help carrying groceries in the house.	Oakland
There is not a single dial-a-ride agency. The different services need to be brought together	Oakland
Paratransit can be expensive.	Oakland
Intercounty paratransit not working; poor linkages between providers.	SF
Perceptions of paratransit eligibility requirements; associations with "disability" discourage seniors from signing up.	San Jose
Processing time for enrolling in Outreach ADA paratransit is too long.	San Jose
Sensitivity training needed for providers.	San Jose
Providers not getting feedback from seniors on the service they're getting.	San Jose
Same day urgent trips are not affordable.	San Jose
Temperature and weather conditions discourage use of transit.	San Jose
Assistance needed beyond the door of the destination.	San Jose
Transfers between multiple operators on ADA paratransit (even for short trips)	Vallejo
Not enough rides on the ADA paratransit	Vallejo
Senior center transportation is poor (bus arrives late).	Vallejo
Paratransit interface between multiple operators	Vallejo

**Rides**

Volunteer programs have insurance issues.	Oakland
Issue of liability for volunteer drivers serving frail elderly.	San Jose
Seniors feel obligation/uncomfortable asking people to give them rides.	San Jose
Family members may be unavailable or absent to provide rides and assistance.	San Jose
Paratransit volunteers hard to keep because of time commitment and difficulty of the work.	San Jose

Dial-a-Ride	Oakland
Paratransit more like a taxi or personal ride	Oakland

Help seniors "hire" their own volunteer drivers using mileage reimbursement funding.	Novato
Incentivize volunteer services, e.g. with tax credits or "free breakfasts."	Novato
Involve youth, e.g. Boy Scouts in providing transportation assistance.	Oakland
Subsidy for volunteer drivers	Oakland
Co-op to exchange services (e.g. rides)	Oakland
Legislation for liability exemptions to encourage volunteers	San Jose
Tax deductions for volunteers for providing transportation services.	San Jose
Pay volunteers e.g. by using vouchers.	San Jose
Volunteer programs and incentives for people to provide rides to seniors.	Vallejo
Reimbursement for ride givers (as done in Riverside County)	Vallejo
Work with religious organizations to provide/volunteer transport programs (e.g., faith in action).	Vallejo

### Social Service Access

Kaiser is moving/growing services away from bus routes (transit, medical services, and residential locations are not being coordinated).	Oakland
Medical facilities (dialysis centers) are not accessible by public transit/paratransit.	Oakland
Residents in residential care facilities do not have transportation services. Creates a problem of access to medical care.	SF
Hospital discharges lack affordable transportation service (other than ambulance).	SF
Workers have difficulty accessing senior households to provide in-home services.	San Jose
Senior access to medical services needed across county.	San Jose
Transportation needed to help caregivers reach seniors (and therefore keep them outside institutions).	San Jose
Caregivers have difficulty getting to seniors, and have limited time/ability to provide transportation.	Vallejo
Medical centers are far from senior communities and the trend is for more regional facilities than can require a trip across service boundaries.	Vallejo

Coordinate transportation services with medical providers.	Novato
Transportation services for hospital discharges (gurney services)	SF
Get HMO's like Kaiser to provide transportation with medical services.	San Jose
Get counties to donate cars from motor pools to senior centers.	Vallejo
Coordination with medical providers to provide transportation services.	Vallejo

### Shuttles

Merchants subsidize shuttle service for their customers.	Oakland
Jitney services	Oakland
More services like the special Muni shuttle that serves Laguna Honda	SF
Shuttles and service routes for seniors	SF
Route taxis (jitney services)	SF
Business-provided shuttles (like Cole Hardware); may need an incentive; merchant district shuttle; help carrying groceries home	SF
Shuttle Services.	San Jose
Feeder shuttle service from hills.	San Jose
Markets/stores provide shuttle services subsidized by merchant and customer.	San Jose
More shuttles (like Foster City shuttle and San Mateo Senior Center shuttle).	San Jose
Provide a list of stores and services that will provide either shuttle service/or delivery.	San Jose
Shopping centers should provide shuttle and delivery services.	Vallejo
Prepare a business plan for shopping mall owners to show shuttle service would give them business, advertising.	Vallejo
Incentive programs for businesses to provide transportation for seniors (tax incentives)	Vallejo
Identify point to point trips (large groups of people with common origin and destination).	Vallejo

### Transit

Personal safety with public transportation, ADA Paratransit, all modes	Oakland
Learning to use transit is difficult (if you come from suburbs and are used to driving).	Oakland
It takes a long time to get places on suburban transit.	Oakland
Language can be a problem for seniors on transit.	Oakland
Need for local shuttle services in all neighborhoods. Seniors cannot drive or get to shops.	Oakland
Impaired vision reduces seniors' ability to see bus stops.	Oakland
Drivers do not announce stops.	Oakland
Public transportation needs to be more accessible for everyone.	Oakland

Fixed routes designed to be senior-friendly, as in Santa Rosa for example.	Novato
Improve facilities at the San Rafael Transit Center, e.g. provide a café.	Novato
Local shuttles like West Oakland	Oakland
Public body to provide personal escort service on transit	Oakland
Free off-peak service to seniors on transit	Oakland
Some sort of pass system (like UCB class pass, Santa Clara Eco-Pass)	Oakland
Use idle time on vehicles when they're not in service for senior transportation.	Oakland
Free transportation for seniors over 80	Oakland

Vision impairments make it difficult to orient around bus stops, benches.	Oakland
Location of bus stops signage is too high to see; hearing the bus driver is difficult.	Oakland
Rolling destination signage on buses makes it difficult to know where a bus is going.	Oakland
Wrapped buses are confusing--difficult to know that it's a public transit vehicle.	Oakland
SF may have the "best public transit" in the Bay Area but seniors and persons with disabilities still have major issues of access <u>in</u> the City in regards to transit and pedestrian movement.	SF
Transfers on transit take time and are not certain. Intercounty systems are horrible. Connections and fares are not integrated.	SF
Discourtesy of transit drivers: drivers are not trained. They don't wait for passengers to sit down before moving.	SF
SF's Muni is not 100% accessible fixed route service like in other counties.	SF
Fear of crime in using the bus.	San Jose
Seniors on paratransit need assistance like escorts.	San Jose
Transit routes may not be direct enough (e.g., between home & stores)	Vallejo
Not enough transit	Vallejo
Getting on/off bus	Vallejo

Bay Area discounted pass for seniors for all transit operations	Oakland
Increase frequencies of buses (more service).	Oakland
Expand capacity of paratransit (more service).	Oakland
Bus stops identified for visual/hearing impaired	Oakland
Senior clubs, connect with transportation and services	Oakland
Transit, more transit to everyone	Oakland
Better waiting areas	Oakland
Braille bus stops	Oakland
Escorts - transit	SF
Changes to location of bus stops	SF
Escort/companion service to help seniors travel	SF
Expand the senior escort program for regional transit trips as well	SF
Enforce the dedication of curbside bus loading zones.	SF
Bus stops/streets need better lighting	SF
Escort programs by private non-profits and volunteers may be cheaper than public agency ones like to San Francisco police program.	SF
Handicapped-accessible vehicles	Vallejo
Charter school bus vehicles to serve seniors.	Vallejo
Make transit easier to use (e.g., low-floor vehicles).	Vallejo
Use employee shuttle vehicles during the mid-day to serve senior centers.	Vallejo

### Taxis

Taxi/van drivers are penalized with a ticket for assisting passengers from the vehicle to their destination if they are parked in a blue zone.	SF
Few taxi cabs (also cabs cannot accommodate chairs & walkers)	Vallejo

Taxi companies should address senior transportation issues.	Novato
Relax and coordinate taxi regulations to make programs like Santa Rosa's work	Novato
Work with taxi companies.	Novato
Subsidize taxi service, including accessible taxis (e.g., Santa Rosa taxi discount program).	Novato
Help cab companies meet regulatory requirements (e.g. drug testing, insurance).	Novato
Taxi scrip	Oakland
Neighborhood taxi stands	SF
Cab companies/drivers need more resources to improve/expand service.	SF

# **APPENDIX B**

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## Working Group Materials

- Meeting Invitation
- Working Group Roster
- Working Group Agenda, February 21, 2002
- Working Group Agenda, July 18, 2002

**Meeting Invitation  
Bay Area Senior Transportation Study  
Working Group Meeting**

The Metropolitan Transportation Commission (MTC), with assistance from Nelson\Nygaard Consulting Associates, is beginning a project to help develop regional strategies to address transportation issues for older adults. Recently you were contacted about participating on a Working Group that will advise MTC and Nelson\Nygaard about the conduct of the study. Thank you for agreeing to be a part of this Working Group. We plan to convene the Working Group twice: once now at the beginning of study, and again after we have gathered information and are ready to formulate some recommendations. The Working Group includes representation from

- County Commissions on Aging
- MTC's Elderly and Disabled Advisory Committee
- Transit Operators
- Key advocacy groups

We are aware that there are many more people with an interest in this topic whom we need to hear from. We will be convening four focus groups in locations around the Bay Area and will be inviting the widest possible array of people with knowledge and interest about seniors and their transportation needs. As a member of the Working Group, advising us about these focus groups will one of your key roles. Also, at the end of the project, MTC will host a major regional conference on the topic of senior transportation that will involve a broad group of stakeholders. This conference will build on the "Mobility Matters" conference held at MTC in 2000.

The Working Group meeting will take place:

**Thursday, February 21, 2002  
Metropolitan Transportation Commission  
Metro Center, 101 Eighth Street  
3<sup>rd</sup> floor "fishbowl" conference room  
11:30 a.m. to 1:30 p.m.**

**Lunch will be served.**

Directions to MTC are enclosed.

**Please RSVP** to Kevin Dwarka or David Koffman of Nelson\Nygaard at (415) 284-1544 or e-mail [dkoffman@nelsonnygaard.com](mailto:dkoffman@nelsonnygaard.com). Be sure to let us know if you have any special needs we should be aware of.

## Working Group of the Older Adults Transportation Study

Contact Name	Commission or Organization
Annette Williams	San Francisco Municipal Railway
Barbara Rhodes	EDAC, Santa Clara VTA, Committee on Transit Accessibility
Barbara Schuh	Contra Costa County Advisory Council on Aging
Betty Mulholland	Alameda County Commission on Aging, PAPCO, SRAC
Elize Brown	UC Berkeley School of Public Health
Jeff Hobson	Bay Area Transportation and Land Use Coalition
Jo Anne Weber	Marin County Commission on Aging
Joanna Selby	Alameda County Commission on Aging
John Loll	Marin County Transit District
Marianne Mannia	California Senior Legislature (CSL), San Mateo County PCC
May Huddleston	EDAC
May Nichols	San Mateo County Commission on Aging
Peter Szego	AARP, Santa Clara County
Roosevelt C. Franklin	Solano County Commission On Aging, City of Vacaville
Steve Belkin	EDAC



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**MTC's Older Adults Transportation Planning Study  
Working Group Meeting  
February 21, 2002  
11:30 a.m.-1:30 p.m.  
MTC offices  
101 8<sup>th</sup> Street, Oakland, 3<sup>rd</sup> Floor Conference Room**

**AGENDA**

- |  |                    |
|--|--------------------|
| 1. Welcome/Introductions                         | All                |
| 2. Purpose/Schedule of Planning Study            | Connie Soper, MTC  |
| 3. Role of Working Group                         | David Koffman, N\N |
| 4. Technical Analysis to support planning effort | David Koffman, N\N |
| 5. Role of GIS mapping                           | Rick Kos, MTC      |
| 6. Upcoming Project Tasks: Focused Workshops     | David Koffman, N\N |
| 7. Mobility Matters Conference                   | Connie Soper, MTC  |
| 8. Next Meeting                                  | David Koffman, N\N |
| 9. Adjourn by 1:30 p.m.                          |                    |



## **Agenda**

**Older Adults Transportation Study  
Working Group Meeting  
Thursday, July 18, 2002  
12:00 noon to 3:00 p.m.**

**Metropolitan Transportation Commission  
Lake Merritt Plaza  
1999 Harrison Street, 17th Floor  
Oakland, CA 94612**

### **Claremont Conference Room**

12:00 – 12:05	Welcome and Introductions
12:05 – 12:15	Review of the progress on the project.
12:15 – 12:30	Serve lunch
12:30 – 1:30	Presentation and discussion of barriers, strategies, and solutions. (See attached table.)
1:30 – 1:45	Break
1:45 – 2:30	Presentation and discussion of principles and criteria for evaluating the strategies and solutions. (See attached.)
2:30 – 2:45	Assigning weights to the principles and criteria.
2:45 – 3:00	Discussion of next steps.

## **APPENDIX C**

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### Documentation of the Mapping Analysis

833 Market Street, Suite 900  
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(415) 284-1544 FAX: (415) 284-1554

**To: Connie Soper**  
**From: David Koffman**  
**Date: June 14, 2002**  
**Subject: Geographic Analysis for OATS (Technical Memo No. 3)**

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Task 3 of the Older Adults Transportation Study requires an analysis of detailed demographic information for each of the nine counties regarding anticipated population patterns over the next 20 years. Technical Memo No. 4, which was submitted in May, included projections of the senior population at the county level. This memo documents the results of the more detailed analysis that has been completed using maps created by MTC staff using the agency's Geographic Information System.

The analysis compares the locations of current and projected senior population with levels of transit service in those same areas. The analysis tests the following scenario:

At least until recently many older adults have lived in central cities and established suburbs with good transit service. To a great degree this is assumed to reflect residential patterns established when these people were younger and population was not as decentralized as it is today. If people who are in their later working years continue to live where they do today, then it likely that, in the future, more older adults will live in newer suburbs and other areas with limited transit service.

The analysis tests this scenario using projections of population from the Association of Bay Area Governments (ABAG) and transit data developed by MTC's travel modeling group.

The results of the analysis are presented first, followed by a more technical discussion of how the analysis was conducted.

### **Maps of Senior Population and Access**

Four maps were prepared as follows:

- Senior Population (Age 65 and older): one map for 2000 and one for 2025.
- Access to Destinations by Transit: one map for 2000 and one for 2025.

All the maps use MTC's system of Traffic Analysis Zones (TAZs). There are 1,099 TAZs that cover the Bay Area. This zone system is the one that MTC uses for its travel modeling, and it is the basis for an analysis of transit access that was prepared by MTC for use in other projects. The senior population maps use data from the Association of

## **Geographic Analysis for OATS (Technical Memo No. 3)**

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Bay Area Governments' (ABAG's) *Projections 2000*. The original ABAG projections were for Census tracts, and extended to 2020. The census tract projections were combined by MTC into TAZ projections. MTC also extended the projections to 2025 to match the MTC travel model corresponding to the horizon year of the Regional Transportation Plan. Age 65 was used as a cut off for defining "senior" because that is the only available division in the ABAG population projections. (ABAG prepares county-level projections in five-year age increments, but the agency's tract-level projections use fewer age ranges.)

The maps of access by transit indicate how well people living in each zone can reach retail and service destinations by transit during the midday. This measure was created by MTC by combining the level of transit service available in each zone, travel times by transit within the zone and to nearby zones, and the level of retail and service activity in the zone and nearby zones. It represents how well seniors who choose to use transit or who can no longer drive can reach destinations of interest. Zones that have frequent, closely spaced transit service and that contain or are near to concentrations of retail and service activity score very high. Zones that have less transit service, less retail and service activity, or transit that provides less direct connections to these activities, score lower. Midday service levels were analyzed instead of peak-period ones, because seniors who no longer work tend to travel more at those times. (Additional detail on how the measure of transit access was developed is presented at the end of this memo.)

### **Senior Population**

Figure 1 shows senior population in 2000. Note that the map is based on numbers of seniors, not the percent of people over a certain age. The map indicates that there are significant concentrations of older adults in the central cities of San Francisco and Oakland, and other established areas of relatively high density like Berkeley, Richmond, San Rafael, and central San Jose. However, the maps show that the senior population, like the general population, is already substantially spread out, with high concentrations in places away from established corridors, including the hill areas of the Peninsula, south San Jose together with Morgan Hill and Gilroy, eastern Contra Costa and Alameda counties, Napa, and large areas of Sonoma County.

Figure 2 displays the growth that is projected between 2000 and 2025. The decentralizing trend already present in 2000 accelerates. All of the areas with the greatest amount of growth are in the more outlying portions of the region. The established urban areas and older suburbs are expected to see a decline in numbers or very slow growth. As with Figure 1, the map shows numbers, not percentages. Therefore some places that are expected to have high percentages of senior population but which are growing slowly, such as Marin County, are shown as have low senior population growth levels.

#### **Access by Transit**

Figure 3 shows existing levels of access by transit. As described before, this map uses a measure of how many retail and service destinations can be reached using transit. The precise divisions between the categories (basic, good, very good, and excellent) were chosen based on natural breaks in the spread of the data, and adjusted to correspond roughly to an intuitive understanding of transit service levels. As expected, only the central cities of San Francisco and Oakland, plus portions of Berkeley, downtown San Jose, and a small portion of northern San Mateo County (corresponding roughly to the end of BART line) have excellent or very good access to destinations by transit. Good access by transit is available in the developed spine of the East Bay, most of San Jose and the older developed areas of Santa Clara County, central Walnut Creek and Concord, central San Rafael, and the central spine of development in San Mateo County. Other extensive areas have only basic levels of access of transit. Note that the analysis shows ability to reach destinations, not just transit service levels. As a result, some areas that have moderately high levels of transit service may show as having only basic access if they are close to fewer concentrations of retail and service activity than other areas. Of particular interest to this project, note that transit service does not correspond closely to the location of seniors, even in 2000, and not at all to the locations expected to have the most rapid growth in the senior population.

Figure 4 shows how access by transit may improve over the next 25 years. This analysis is based on MTC's adopted Regional Transportation Plan and ABAG's projections of retail and service activity in the future. It is assumed that all transit projects in the RTP will be implemented. Those areas with better transit or with increases in nearby concentrations of retail and service activity are shown as having higher levels of access by transit. The map shows significant improvements in access, consisting mainly of expansions of the corridors that currently have good or very good service. Some areas of notable improvement include central San Jose, the central developed corridor of Santa Clara County, Fremont, the Highway 101 corridor of Sonoma County, and the Highway 680 corridor.

If all of these improvements are implemented they will significantly aid existing and expected future concentrations of seniors. However, many areas with existing concentrations, and areas with expected large increases, will still have only basic access by transit. In addition some improvements may be a nature that is less useful to seniors than it might appear. For example, improved access in San Jose reflects a planned extension of BART. This BART extension will increase access to destinations on a regional level, but will have less impact on access to local destinations that may be of most interest to seniors.

#### **Analysis of Population and Transit Access**

The data used in the maps have been analyzed to provide a more quantitative picture of transit service that may be available to seniors in the future. Table 1 show shows the senior population living in zones with each of the levels of access depicted in the maps.

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For Year 2000, the analysis shows that 53% of seniors live in areas with no transit or basic access to services by transit. Only 18% of seniors live in places with very good or excellent access. By 2025, if there is no improvement in transit services, the picture will get significantly worse—59% of seniors will have no or basic access to services by transit and only 13% will have good or excellent access. However, if all of the improvements in the Regional Transportation Plan are implemented, then the situation will be somewhat better than it is now. Currently, 41% of seniors live in areas that *will have* no or basic transit access, and 23% live in areas that *will have* very good or excellent transit access. As a result, even with high growth in the low-access areas, the percentage of seniors with no or basic access to services by transit will decline to 46% and the percentage with very good or excellent access will increase slightly to 19%.

**Table 1. Senior Population and Access by Transit**

Access Level	Existing Transit Access Levels				RTP Transit Service Levels			
	2000 Population Locations		2025 Population Locations		2000 Population Locations		2025 Population Locations	
	Population	Percent	Population	Percent	Population	Percent	Population	Percent
Excellent	56,080	7%	85,242	5%	97,345	12%	149,161	9%
Very Good	84,349	11%	125,829	8%	88,024	11%	156,518	10%
Good	235,593	30%	437,646	28%	278,555	35%	543,462	35%
Basic	383,645	49%	849,120	54%	299,632	38%	660,234	42%
None	29,511	4%	75,601	5%	25,622	3%	64,063	4%
Grand Total	789,178	100%	1,573,438	100%	789,178	100%	1,573,438	100%

While these figures provide some basis for optimism, it is still clear that there will be very large numbers of seniors for whom transit will offer extremely limited mobility if they cannot drive or have limited driving ability. Seen another way, the data show that 65% of the growth in senior population will occur in places that now have no or only basic access by transit. If all RTP transit improvements are completed, then 51% of the growth will occur in places that will still have no or only basic access by transit.

### Additional Technical Information about the Mapping Process

#### Geographic Unit of Analysis

The geographic unit of analysis selected for this analysis is the Travel Analysis Zone (TAZ). The zones are based on 1990 census geography. They are either identical to 1990 census tracts (e.g., in all north bay counties), are combinations of census tracts, or are parts of census tracts (e.g., in downtown San Francisco, Oakland Airport, and Silicon Valley in the South Bay.)<sup>1</sup> They are typically small area neighborhoods or

<sup>1</sup> Metropolitan Transportation Commission DataMart web site at <http://www.mtc.ca.gov/datamart.htm>

communities that serve as the smallest geographic basis for travel demand model forecasting systems. Some zones are quite large; for example, one zone covers nearly one-fifth of sparsely settled Sonoma County. On the other hand, some zones are very small, especially in the densely urbanized portions of San Francisco where some TAZs cover only a few square blocks. There are currently 1099 TAZs in the nine-county Bay Area, compared with 1,382 census tracts. On average, each TAZ contains about 6,000 people, but there is wide variation in the actual population in each zone.

The decision to use this unit of analysis was based primarily on the readily available demographic and transit accessibility data at the zone level. This information had been recently incorporated into MTC's modeling studies prior to the release of the 2001 Regional Transportation Plan (RTP).

#### Selection of Analysis Years

In order to make available both projected and historic information, available TAZ counts and projections were collected for the following years: 1990, 1995, 1998, 2005, 2010, 2015, 2020, and 2025. It should be noted that 1998 data was used for current conditions (and not 2000) because this is the last year in which verified demographic and transit accessibility data are *both* available. For the sake of presentation, 1998 is assumed not to be significantly different from 2000. Regarding the data for future years, staff used the ABAG *Projections 2000* data as a starting point. (Although ABAG has released its more recent *Projections 2002*, the related census tract level projections are not yet available.) ABAG calculated census-tract level demographic forecasts through the year 2020 which MTC combined and allocated to the 1099 regional travel analysis zone system, and extended to 2025. This year matches the year for which MTC has developed a horizon-year travel model to support the 2025 Regional Transportation Plan.

#### Measuring Access by Transit

Access by transit was measured using the number of retail and service destinations that could be reached within a certain time via public transportation. In order to calculate this, staff turned to BAYCAST, MTC's travel model.<sup>2</sup> The full BAYCAST model predicts travel volumes and levels of service on all modes between TAZs using variables including population and employment in each zone, time of day, road and transit connections between TAZs, and destination types. BAYCAST uses a six-step process that incorporates the following:

1. The level of auto ownership and workers per household.
2. Trip generation (how many trips are produced and attracted by each TAZ)
3. Trip distribution (how many trips go between each possible TAZ pair)

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<sup>2</sup> BAYCAST-1990 User's Guide, San Francisco Bay Area Travel Demand Model System, (TP+/Viper version). Metropolitan Transportation Commission Planning Section, June 2001. Available at <ftp://ftp.abag.ca.gov/pub/mtc/planning/models/>

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4. Mode choice (which modes the trips will be made by - auto, transit, bicycling, walking)
5. Time-of-day choice (when trips will be made - morning commute hours or midday)
6. Trip assignment (what paths the trips take to reach destinations)

The access by transit analysis used only the underlying employment data by zone, and the transit network as coded for the model, including travel time by transit between each zone.

The transit access analysis represented the level of activity at various kinds of destinations by the employment at each type of destination to be reached. This measure was chosen for the analysis's original application, which was to determine how well the transit system served low-income people looking for work. Although the majority of seniors do not work, employment can be used simply as a measure of the level of activity at places that seniors may want to get to. Specifically, retail and service sector employment was isolated in an attempt to capture the level of activity at destinations such as stores, banks, hospitals, and restaurants of interest to seniors. Employment representing destinations not generally of interest to seniors was excluded. These categories include manufacturing, construction, and wholesale trade.

The BAYCAST model for 1998 and 2025 was used to calculate the total number of jobs ("destinations") that a person living in each TAZ could reach in 30 minutes and in 45 minutes by transit. Estimates were made for transit trips with walk-access as well as transit trips with auto-access. The model incorporates walk time to the transit stop, waiting time, travel time, transfer time, and walk time from the destination stop.

MTC modeling staff provided the following values derived from BAYCAST for the years 1998 and 2005, for both retail and service jobs:

- Number of Jobs within 30 and 45 minutes by transit, morning peak hours, walk to transit
- Number of Jobs within 30 and 45 minutes by transit, morning peak hours, walk or drive to transit
- Number of Jobs within 30 and 45 minutes by transit, midday hours, walk to transit

There are a total of 12 possible combinations using the above variables. In the end, the following two were chosen:

- Number of Retail Jobs within 45 minutes by transit, midday hours, walk to transit
- Number of Service Jobs within 45 minutes by transit, midday hours, walk to transit

The choice to use the longer travel time, 45 minutes, was made as a reasonable estimate of time that a non-employed person would be willing to spend reaching destinations of interest. Midday travel times were chosen given the assumption that many seniors prefer not to travel during congested commute hours, if possible. Stores

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and services are commonly not open to the public except after the peak morning commute hours. Since the intent of this project was to consider what options exist for seniors who can no longer drive, only the calculations for transit with walk-access were used.

The wide range of transportation improvement projects in MTC's 2025 Regional Transportation Plan were incorporated into the BAYCAST model and the GIS maps reflect these projects. For example, the RTP assumes that the extension of BART to San Jose will be completed; thus, the TAZs in the vicinity of downtown San Jose show a marked improvement in transit accessibility from 2000 to 2025.

### **Updating the Analysis**

Sometime later in 2002, ABAG will release census tract projections based on its *Projections 2002*. At that time, MTC may wish to update this analysis. The transit access calculations by zone will not change. However, new population data for both 2000 (which can be used to estimate population in 1998 to match the MTC travel model) and 2025 will be available. The existing GIS base maps can be used without modification. The data cutoff values for dividing transit access into basic, good, very good, and excellent categories will also not change.